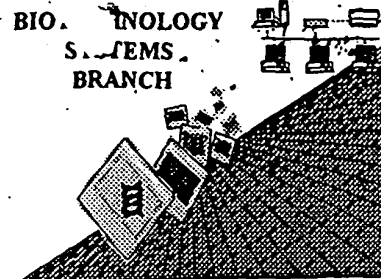


## RAW SEQUENCE LISTING ERROR REPORT



#12

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: US 09/479,608

Source: OIPE

Date Processed by STIC: 08 09 2001

**THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.**

**PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:**

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

**FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.**

**FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.**

**PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)**

**PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)**

**TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:**

### **Checker Version 3.0**

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

# Raw Sequence Listing Error Summary

## ERROR DETECTED

## SUGGESTED CORRECTION

SERIAL NUMBER: 09/479608

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1        Wrapped Nucleics  
      Wrapped Aminos      The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2        Invalid Line Length      The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3        Misaligned Amino  
      Numbering      The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4        Non-ASCII      The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5        Variable Length      Sequence(s)        contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6        PatentIn 2.0  
      "bug"      A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s)       . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7        Skipped Sequences  
      (OLD RULES)      Sequence(s)        missing. If intentional, please insert the following lines for each skipped sequence:  
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
This sequence is intentionally skipped  
  
Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8        Skipped Sequences  
      (NEW RULES)      Sequence(s)        missing. If intentional, please insert the following lines for each skipped sequence.  
<210> sequence id number  
<400> sequence id number  
000
- 9        Use of n's or Xaa's  
      (NEW RULES)      Use of n's and/or Xaa's have been detected in the Sequence Listing.  
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10        Invalid <213>  
      Response      Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 ✓ Use of <220>      Sequence(s)        missing the <220> "Feature" and associated numeric identifiers and responses.  
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12        PatentIn 2.0  
      "bug"      Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13        Misuse of n      n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

AMC/MH - Biotechnology Systems Branch - 08/21/2001

The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/479,608

DATE: 08/09/2001  
TIME: 13:18:12

Input Set : A:\35918.txt  
Output Set: N:\CRF3\08092001\I479608.raw

Does Not Comply  
Corrected Diskette Needed

5 <110> APPLICANT: Drmanac, R.  
6 Drmanac, S.  
7 Kita, D.  
8 Cooke, C.  
9 Xu, C.

11 <120> TITLE OF INVENTION: ENHANCED SEQUENCING BY HYBRIDIZATION USING POOLS OF PROBES  
13 <130> FILE REFERENCE: 28110/35918  
15 <140> CURRENT APPLICATION NUMBER: US 09/479,608  
16 <141> CURRENT FILING DATE: 2000-01-06  
18 <150> PRIOR APPLICATION NUMBER: US 60/115,284  
19 <151> PRIOR FILING DATE: 1999-01-06  
21 <160> NUMBER OF SEQ ID NOS: 71  
23 <170> SOFTWARE: PatentIn version 3.0  
25 <210> SEQ ID NO: 1  
26 <211> LENGTH: 10  
27 <212> TYPE: DNA  
28 <213> ORGANISM: Artificial Sequence  
30 <220> FEATURE:  
31 <223> OTHER INFORMATION: Description required in field 223  
33 <400> SEQUENCE: 1  
34 aaaaaaaaaa 10  
37 <210> SEQ ID NO: 2  
38 <211> LENGTH: 10  
39 <212> TYPE: DNA  
40 <213> ORGANISM: Artificial Sequence  
42 <220> FEATURE:  
43 <223> OTHER INFORMATION: Description of artificial sequence required  
45 <400> SEQUENCE: 2  
46 acacacacac 10  
48 <210> SEQ ID NO: 3  
49 <211> LENGTH: 20  
50 <212> TYPE: DNA  
51 <213> ORGANISM: Artificial Sequence  
53 <220> FEATURE:  
54 <223> OTHER INFORMATION: description of artificial sequence required  
56 <400> SEQUENCE: 3  
57 atctgtgtct gaagtagtcc 20  
59 <210> SEQ ID NO: 4  
60 <211> LENGTH: 20  
61 <212> TYPE: DNA  
62 <213> ORGANISM: Artificial Sequence  
64 <220> FEATURE:  
65 <223> OTHER INFORMATION:   
67 <400> SEQUENCE: 4  
68 atctctggct gaagtagtcc 20  
70 <210> SEQ ID NO: 5  
71 <211> LENGTH: 43

**The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.**

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/479,608

DATE: 08/09/2001  
TIME: 13:18:12

Input Set : A:\35918.txt  
Output Set: N:\CRF3\08092001\I479608.raw

72 <212> TYPE: DNA  
73 <213> ORGANISM: Artificial Sequence  
75 <220> FEATURE:  
76 <221> NAME/KEY: misc\_feature  
77 <222> LOCATION:  
78 <223> OTHER INFORMATION: b = C or G or T *OK*  
80 <400> SEQUENCE: 5  
81 bbbbbbattt cbbbbbgtac tbbbbgtttg bbbacacgbb bbb  
83 <210> SEQ ID NO: 6  
84 <211> LENGTH: 43  
85 <212> TYPE: DNA  
86 <213> ORGANISM: Artificial Sequence  
88 <220> FEATURE:  
89 <221> NAME/KEY: misc\_feature  
90 <222> LOCATION:  
91 <223> OTHER INFORMATION: b = C or G or T  
93 <400> SEQUENCE: 6  
94 bbbbbbattt gbbbacactb bbbgtttcbb bbbgcacgbb bbb  
96 <210> SEQ ID NO: 7  
97 <211> LENGTH: 10  
98 <212> TYPE: DNA  
99 <213> ORGANISM: Artificial Sequence  
101 <220> FEATURE:  
102 <223> OTHER INFORMATION:  
104 <400> SEQUENCE: 7  
105 ggtctcccca  
107 <210> SEQ ID NO: 8  
108 <211> LENGTH: 10  
109 <212> TYPE: DNA  
110 <213> ORGANISM: Artificial Sequence  
112 <220> FEATURE:  
113 <223> OTHER INFORMATION:  
115 <400> SEQUENCE: 8  
116 gtctcccca  
118 <210> SEQ ID NO: 9  
119 <211> LENGTH: 10  
120 <212> TYPE: DNA  
121 <213> ORGANISM: Artificial Sequence  
124 <220> FEATURE:  
125 <223> OTHER INFORMATION:  
127 <400> SEQUENCE: 9  
128 tctccccaag  
130 <210> SEQ ID NO: 10  
131 <211> LENGTH: 10  
132 <212> TYPE: DNA  
133 <213> ORGANISM: Artificial Sequence  
135 <220> FEATURE:  
136 <223> OTHER INFORMATION:  
138 <400> SEQUENCE: 10

*Field 223 with description of  
artificial sequence required*

43

10

10

10

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/479,608

DATE: 08/09/2001

TIME: 13:18:12

Input Set : A:\35918.txt

Output Set: N:\CRF3\08092001\I479608.raw

139 ctccccaagg 10  
141 <210> SEQ ID NO: 11  
142 <211> LENGTH: 10  
143 <212> TYPE: DNA  
144 <213> ORGANISM: Artificial Sequence  
146 <220> FEATURE:  
147 <223> OTHER INFORMATION:  
149 <400> SEQUENCE: 11  
150 tccccaaggc 10  
152 <210> SEQ ID NO: 12  
153 <211> LENGTH: 10  
154 <212> TYPE: DNA  
155 <213> ORGANISM: Artificial Sequence  
157 <220> FEATURE:  
158 <223> OTHER INFORMATION:  
160 <400> SEQUENCE: 12  
161 cccaaggcgc 10  
163 <210> SEQ ID NO: 13  
164 <211> LENGTH: 10  
165 <212> TYPE: DNA  
166 <213> ORGANISM: Artificial Sequence  
168 <220> FEATURE:  
169 <223> OTHER INFORMATION:  
171 <400> SEQUENCE: 13  
172 cccaaggcgc 10  
174 <210> SEQ ID NO: 14  
175 <211> LENGTH: 10  
176 <212> TYPE: DNA  
177 <213> ORGANISM: Artificial Sequence  
179 <220> FEATURE:  
180 <223> OTHER INFORMATION:  
182 <400> SEQUENCE: 14  
183 ccaaggcgca 10  
185 <210> SEQ ID NO: 15  
186 <211> LENGTH: 10  
187 <212> TYPE: DNA  
188 <213> ORGANISM: Artificial Sequence  
190 <220> FEATURE:  
191 <223> OTHER INFORMATION:  
193 <400> SEQUENCE: 15  
194 caaggcgcac 10  
197 <210> SEQ ID NO: 16  
198 <211> LENGTH: 30  
199 <212> TYPE: DNA  
200 <213> ORGANISM: Artificial sequence  
202 <220> FEATURE:  
203 <223> OTHER INFORMATION:  
205 <400> SEQUENCE: 16  
206 tgcttgccac aggtctcccc aaggcgca 30

*Field 223 description required*

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/479,608

DATE: 08/09/2001  
TIME: 13:18:12

Input Set : A:\35918.txt  
Output Set: N:\CRF3\08092001\I479608.raw

```
209 <210> SEQ ID NO: 17
210 <211> LENGTH: 10
211 <212> TYPE: DNA
212 <213> ORGANISM: Artificial Sequence
214 <220> FEATURE:
215 <223> OTHER INFORMATION:
217 <400> SEQUENCE: 17
218 aggtctcccc 10
221 <210> SEQ ID NO: 18
222 <211> LENGTH: 10
223 <212> TYPE: DNA
224 <213> ORGANISM: Artificial Sequence
226 <220> FEATURE:
227 <223> OTHER INFORMATION:
229 <400> SEQUENCE: 18
230 ggtctcccca 10
233 <210> SEQ ID NO: 19
234 <211> LENGTH: 10
235 <212> TYPE: DNA
236 <213> ORGANISM: Artificial Sequence
238 <220> FEATURE:
239 <223> OTHER INFORMATION:
241 <400> SEQUENCE: 19
242 gtctccccaa 10
244 <210> SEQ ID NO: 20
245 <211> LENGTH: 10
246 <212> TYPE: DNA
247 <213> ORGANISM: Artificial Sequence
249 <220> FEATURE:
250 <223> OTHER INFORMATION:
252 <400> SEQUENCE: 20
253 tctccccaag 10
255 <210> SEQ ID NO: 21
256 <211> LENGTH: 10
257 <212> TYPE: DNA
258 <213> ORGANISM: Artificial Sequence
260 <220> FEATURE:
261 <223> OTHER INFORMATION:
263 <400> SEQUENCE: 21
264 ctccccaagg 10
266 <210> SEQ ID NO: 22
267 <211> LENGTH: 10
268 <212> TYPE: DNA
269 <213> ORGANISM: Artificial Sequence
271 <220> FEATURE:
272 <223> OTHER INFORMATION:
274 <400> SEQUENCE: 22
275 tccccaaggc 10
277 <210> SEQ ID NO: 23
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## RAW SEQUENCE LISTING

DATE: 08/09/2001

PATENT APPLICATION: US/09/479,608

TIME: 13:18:12

Input Set : A:\35918.txt

Output Set: N:\CRF3\08092001\I479608.raw

278 <211> LENGTH: 10  
279 <212> TYPE: DNA  
280 <213> ORGANISM: Artificial Sequence  
282 <220> FEATURE:  
283 <223> OTHER INFORMATION:  
285 <400> SEQUENCE: 23  
286 ccccaaggcg 10  
288 <210> SEQ ID NO: 24  
289 <211> LENGTH: 10  
290 <212> TYPE: DNA  
291 <213> ORGANISM: Artificial Sequence  
293 <220> FEATURE:  
294 <223> OTHER INFORMATION:  
296 <400> SEQUENCE: 24  
297 cccaaggcgc 10  
299 <210> SEQ ID NO: 25  
300 <211> LENGTH: 10  
301 <212> TYPE: DNA  
302 <213> ORGANISM: Artificial Sequences  
304 <220> FEATURE:  
305 <223> OTHER INFORMATION:  
308 <400> SEQUENCE: 25  
309 ccaaggcgca 10  
311 <210> SEQ ID NO: 26  
312 <211> LENGTH: 10  
313 <212> TYPE: DNA  
314 <213> ORGANISM: Artificial Sequence  
316 <220> FEATURE:  
317 <223> OTHER INFORMATION:  
319 <400> SEQUENCE: 26  
320 caaggcgcac 10  
322 <210> SEQ ID NO: 27  
323 <211> LENGTH: 10  
324 <212> TYPE: DNA  
325 <213> ORGANISM: Artificial Sequence  
327 <220> FEATURE:  
328 <223> OTHER INFORMATION:  
330 <400> SEQUENCE: 27  
331 caggtctccc 10  
333 <210> SEQ ID NO: 28  
334 <211> LENGTH: 10  
335 <212> TYPE: DNA  
336 <213> ORGANISM: Artificial Sequences  
338 <220> FEATURE:  
339 <223> OTHER INFORMATION:  
341 <400> SEQUENCE: 28  
342 gcttgccaca 10  
344 <210> SEQ ID NO: 29  
345 <211> LENGTH: 10

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/479,608

DATE: 08/09/2001

TIME: 13:18:13

Input Set : A:\35918.txt

Output Set: N:\CRF3\08092001\I479608.raw



**NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING  
NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES**

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821 - 1.825 for the following reason(s):

- ☒ 1. This application clearly fails to comply with the requirements of 37 CFR 1.821-1.825. Applicant's attention is directed to these regulations, published at 114 OC 29, May 15, 1990 and at 55 FR 18230, May 1, 1990.
- ☒ 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 CFR 1.821(c).
- ☒ 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 CFR 1.821(e).
- ☐ 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 CFR 1.822 and/or 1.823, as indicated on the attached copy of the marked-up "Raw Sequence Listing."
- ☐ 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).
- ☐ 6. The paper copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 CFR 1.821(e).
- ☐ 7. Other: \_\_\_\_\_

**Applicant must provide:**

- ☒ An initial or substitute computer readable form (CRF) copy of the "Sequence Listing"
- ☒ An initial or substitute paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification
- ☒ A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 CFR 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d)

For questions regarding compliance with these requirements, please contact

For Rules Interpretation, call (703) 308-1123

For CRF submission help, call (703) 308-4212

For PatentIn software help, call (703) 557-0400

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